	STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS AND MINING								AMENDE	FOR D REPORT				
APPLICATION FOR PERMIT TO DRILL							1. WELL NAME and N	JMBER Tohonadla	a 36-N					
2. TYPE (	OF WORK	DRILL NEW W	ELL (TO)	REENTER P&	A WELL DEEPEN	I WELL [	)			3. FIELD OR WILDCAT TOHONADLA				
4. TYPE C	OF WELL		Oil Well		d Methane Well: NO		~			5. UNIT or COMMUNI	FIZATION A	GREEME	NT NAM	E
6. NAME	OF OPERATO	R			& PRODUCTION, LLC					7. OPERATOR PHONE	303 910-	9525		
8. ADDRE	SS OF OPERA				0, Denver , CO, 80202					9. OPERATOR E-MAIL				
	RAL LEASE NU L, INDIAN, OR	JMBER STATE)			11. MINERAL OWNERS		) STATE	) FEE	_	12. SURFACE OWNER		STATE (		:E ( )
13. NAM		14-20-603-229 E OWNER (if box	12 = 'fee')		TEDERAL	DIAIN	Y SIKIL	, ,,,,,		14. SURFACE OWNER		,		
15. ADDF	RESS OF SURF	FACE OWNER (if	box 12 = 'fe	ee')						16. SURFACE OWNER	R E-MAIL (i	f box 12 =	: 'fee')	
17. INDIA	N ALLOTTEE	OR TRIBE NAME			18. INTEND TO COMM		PRODUCTION	N FROM		19. SLANT				
(if box 1	2 = 'INDIAN')	Navajo			(T)		gling Applicati	on) NO	<b>(1)</b>	VERTICAL DIF	RECTIONAL	_ но	RIZONT	AL 🔵
20. LOC	ATION OF WE	LL		FO	OTAGES	QT	FR-QTR	SEC	TION	TOWNSHIP	RAN	GE	МЕ	RIDIAN
LOCATI	ON AT SURFA	CE		402 FSI	_ 1898 FWL	5	SESW	3	36	41.0 S	21.0	Ε		S
Top of U	Jppermost Pr	oducing Zone		402 FSI	_ 1898 FWL		SESW	3	36	41.0 S	21.0	E		S
At Tota				402 FSI	_ 1898 FWL		SESW		36	41.0 S	21.0			S
21. COUI	NTY	SAN JUAN				2. DISTANCE TO NEAREST LEASE LINE (Feet) 402				23. NUMBER OF ACRES IN DRILLING UNIT 2560				
						ISTANCE TO NEAREST WELL IN SAME POOL lied For Drilling or Completed)  1264  26. PROP			26. PROPOSED DEPTI	6. PROPOSED DEPTH MD: 6850 TVD: 6850				
27. ELEV	ATION - GRO	JND LEVEL 4756			RLB0006712			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 09-135				.E		
					Hole, Casing	, and C	Cement Info	rmation	1					
String	Hole Size	Casing Size	Length	Weight	Grade & Thre	ad	Max Mud	l Wt.		Cement		Sacks	Yield	Weight
Cond	20	16	0 - 60	0.0	Unknown		0.0			Unknown		0	0.0	0.0
Surf	12.25	8.625	0 - 140	00 24.0	J-55 Casing/T	ubing	24.0	)	Hallibu	rton Light , Type Ur	nknown	325	1.95	12.4
Prod	7.875	5.5	0 - 685	50 17.0	K-55 Casing/T	uhina	10.0		Hallibu	Unknown rton Light , Type Ur	known	200 510	1.19	15.6 15.2
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AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					FORM	/ 5. IF OPE	ERATOR IS	S OTHER THAN THE LE	EASE OWN	≣R				
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)  TOPOGRAPHICAL MAP														
NAME Lauren Germinario TITLE Land Manager				ager			PHONE	303 538-8300						
SIGNATURE DATE 01/14/				<b>DATE</b> 01/14/20	13			EMAIL	Igerminario@nnogc.co	m				
	iber assigne 03750049				APPROVAL				E	maggill.				
	Permit Manager													

PAGE 1

## Drilling Program

## 1. FORMATION TOPS

The estimated tops of important geologic markers are:

Formation	GL Depth	KB Depth	Elevation
Carmel Sandstone	0'	10'	+4,756'
Navajo Sandstone	281'	291'	+4,475'
Kayenta Sandstone	712'	722'	+4,044'
Wingate Sandstone	756'	766'	+4,000'
Chinle Shale	1,186'	1,196'	+3,570'
Shinarump Sandstone	1,756'	1,766'	+3,000'
Moenkopi Sand & Mud Stones	2,056'	2,066'	+2,700'
DeChelly Ss/Mdst/Shale	2,106'	2,116'	+2,650'
Cutler Shale/Sltst/Ss	2,416'	2,426'	+2,340'
Hermosa Formation	4,656'	4,666'	+100'
Upper Ismay Ls/Dolo/Marls/Shale	5,056'	5,066'	-300'
Lower Ismay Ls/Dolo/Marls/Shale	5,156'	5,166'	-400'
Gothic shale	5,206'	5,216'	-450'
Desert Creek Ls/Dolo/Marls/Shale	5,231'	5,241'	-475'
Barker Creek Ls/Dolo/Anhy/Shale	5,631'	5,641'	-875'
Pinkerton Trail Ls/Dolo/Anhy/Shale	5,806'	5,816'	-1,050'
Leadville Limestone/Dolomite	6,206'	6,216'	-1,450'
Ouray Carbonates	6,406'	6,416'	-1,650'
Elbert Carbonates	6,431'	6,441'	-1,675'
Total Depth (TD)	6,850'	6,860'	-2,094'

## 2. NOTABLE ZONES

Upper Leadville oil production is the primary goal. Oil and gas shows which



PAGE 2

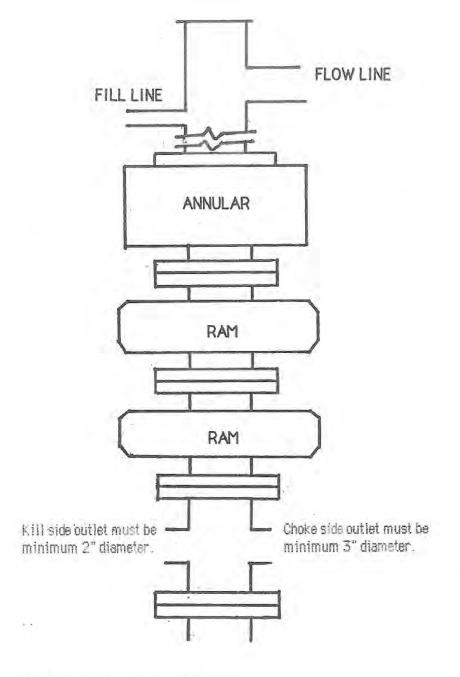
appear to the well geologist to be commercial will be tested. All fresh water and prospectively valuable minerals will be recorded by depth and protected with casing and cement. Likely fresh water zones are the Glen Canyon group of sandstones.

## 3. PRESSURE CONTROL

A 13-5/8" 3,000 psi double ram and annular preventer with a 3,000 psi choke manifold will be used. A diagram of a typical BOP is on Page 3. Actual model will not be known until bid is let. Procedures are ...

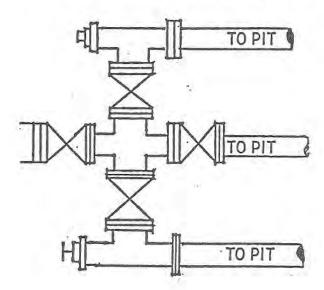
- Nipple up BOP and all equipment Test to 250 #/3,000# Test Hydril to 2,000 psi Log in I. A. D. C. book
- Drill 1/2 of shoe joint Test to 1,500 psi for 30 minutes Log in I. A. D. C. book
- Activate BOPs every 24 hours or on trips and log in I. A. D. C. book
- Install hand wheels and lay straight flare line before drilling out
- Conduct weekly BOP drills with each crew and log in I. A. D. C. book
- Have floor valve and wrench on floor at all times
   Floor valve must be in open position
- Before drilling surface casing shoes, blind rams will be closed. BOP and surface casing will be pressure tested to 1,500 psi for a total test time of 30 minutes if not previously tested by Halliburton during cement job.
- Studs on all well head and BOP flanges will be checked for tightness weekly
- Hand wheels for locking screws will be installed and operational
- Entire BOP and well head assembly will be kept clean of mud
- A drill stem safety valve in the open position will be available
- Call BLM at (505 599-8900) and the Utah Division of Oil, Gas, & Mining at (801 538-5340) before testing BOPs





## TYPICAL BOP STACK & CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter, There will be a pressure gauge on the choke manifold.



Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available.

Safety valve and subs will fit all drill string connections in use.

All BOPE connections subjected to well pressure will be flanged, welded, or clamped.

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## 4. CASING & CEMENT

Hole Size	O. D.	Weight	Grade	Age	Coupling	Burst/Collapse	Depth Set
20"	16"		Conductor	New			60'
12-1/4"	8-5/8"	24#	J or K-55	New	ST&C	2,950/1,370	1,400'
7-7/8"	5-1/2"	17#	J or K-55	New	LT&C	5,320/4,910	6,850'

Conductor pipe will be cemented to the surface with ready-mix.

Surface casing will be cemented to the surface with  $\approx 50\%$  excess. Lead with  $\approx 325$  sacks ( $\approx 633$  cubic feet) Halliburton light with 5 pounds per sack gilsonite + 1/4 pound per sack cellophane mixed at 12.4 pounds per gallon and 1.95 cubic feet per sack. Tail with  $\approx 200$  sacks ( $\approx 238$  cubic feet) standard cement + 1% CaCl<sub>2</sub> + 1/4 pound per sack cellophane mixed at 15.6 pounds per gallon and 1.19 cubic feet per sack. Centralizers will be placed  $\approx 5$ ° off the bottom and on the first three joints and the fifth joint.

Production casing will be cemented with  $\approx$ 40% excess to  $\approx$ 1,200' (i. e.,  $\geq$ 200' above surface casing shoe). Lead with  $\approx$ 510 sacks ( $\approx$ 994 cubic feet) Halliburton light with 5 pounds per sack gilsonite + 1/4 pound per sack cellophane mixed at 12.4 pounds per gallon and 1.95 cubic feet per sack. Tail with  $\approx$ 335 sacks ( $\approx$ 422 cubic feet) premium with 5 pounds per sack gilsonite + 0.6% Halad 9 + 0.25 CFR-3 mixed at 15.2 pounds per gallon and 1.26 cubic feet per sack. Centralizers will be set on the shoe joint, top of the second and third joints, and continue through and above pay zones at  $\approx$ 90' intervals.

## 5. MUD PROGRAM

Interval	Weight	Viscosity	Fluid Loss	Type
0 -1,400'	8.3 - 8.7	27 - 32	N/C	Fresh H <sub>2</sub> O gel lime spud mud, pH 9
1,400' - TD	8.4 - 10.0	38 - 40	8 cc	Fresh water gel & PHPA, SAPP, etc.



API Well Number: 43037500490000

NNOGC Exploration and Production LLC Tohonadla 36-N 402' FSL & 1898' FWL Sec. 36, T. 41 S., R. 21 E. San Juan County, Utah

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Cuttings will be collected every  $\approx 30$ ' from the surface to  $\approx 5,500$ '. Cuttings will be collected every  $\approx 10$ ' from  $\approx 5,500$ ' to TD.

## 6. CORES, LOGS, & TESTS

Cores may be cut depending upon shows, most likely in the Desert Creek. GR - Sonic and DLL-Micro-SFL log suites will be run from TD to the surface. FDC-CNL logs will be run from TD to  $\approx 4,000$ '. No drill stem tests are currently planned.

A geologist or mud logger will be on site from ≈4,000' to TD.

## 7. DOWN HOLE CONDITIONS

No abnormal temperatures or abnormal pressures are expected. Maximum expected bottom hole pressure will be  $\approx 2,945$  psi. Hydrogen sulfide is expected in the Mississippian, just below the Pinkerton. A contingency plan is on file.

## 8. OTHER INFORMATION

The anticipated spud date is May 1, 2012. It is expected it will take  $\approx 3$  weeks to drill and  $\approx 2$  weeks to complete the well.



PAGE 6

## Surface Use Plan

## 1. DIRECTIONS (See PAGES 11 - 13)

From the junction of US 163 and US 191 west of Bluff ....
Go South 8-1/4 miles on US 191 to the equivalent of mile post 13.1
Then turn left and go North 1/3 mile on a sandy road
Then bear right and go Northeast 0.4 mile on a sandy road
Then turn left and go Northwest ≈250 yards on a gravel road to the 35-Pw
Then go east 1,120.21' cross country to the 36-M
Then continue east 972.91' cross country to the 36-N

Roads will be maintained to at least equal to their present condition.

## 2. ROAD WORK (See PAGES 12 & 13)

Work on that portion of the access to the 36-M is described in its APD. The 972.91' of new road from the 36-M to the 36-N will be built to BLM Gold Book standards. Road will have a  $\approx 14$ ' wide running surface and will be rocked where needed. A  $\geq 30$ " O. D. culvert will be installed. No vehicle turn out or cattle guard is needed. Maximum disturbed width will be 20'. Maximum cut or fill = 6'. Maximum grade = 8%.

## 3. EXISTING WELLS (See PAGE 14)

Six plugged wells and five oil wells are within a mile radius. There are no water, gas, or injection wells within a mile radius.

## 4. PROPOSED PRODUCTION FACILITIES (See PAGES 12 & 13)



PAGE 7

A well head and gas powered pump will be installed on the pad. Both will be painted a flat Carlsbad tan. A 972.91' long ≈4" O. D. buried pipeline will be laid west to the Tohonadla 36-M pad. Maximum land use width will be 40', which will include all of the road work.

## 5. WATER SUPPLY

Water will be trucked from Monument Resources' well on private land in 30-40s-22e near Bluff. Water right number is 09-135.

## 6. CONSTRUCTION METHODS & MATERIALS (See PAGES 15 - 17)

The top 6" of soil and brush will be stripped and stockpiled north of the pad. The pit subsoil will be piled north of the pit and separate from the topsoil. A diversion ditch will be cut north of the piles. A diversion ditch will be cut southeast of the pad, or the southeast corner will be rounded off. A minimum 12 mil plastic liner will be installed in the reserve pit. The reserve pit will be fenced sheep tight on 3 sides with woven wire fence topped with barbed wire. The fourth side will be fenced once the rig moves off. The fence will be kept in good repair while the pit dries. Once dry, contents of the reserve pit will be buried in place.

Rock will be bought and trucked from private land near Bluff.

## 7. WASTE DISPOSAL

All trash will be placed in a portable trash cage and hauled to the county landfill. Human waste will be disposed of in chemical toilets. Toilet contents will be hauled to a state approved dump station off the reservation.



PAGE 8

## 8. ANCILLARY FACILITIES

There will be no air strip or camp. Camper trailers will be parked on the pad for the company man, tool pusher, and mud logger.

## 9. WELL SITE LAYOUT

See PAGES 15 - 17 for drawings of the well pad, cross section, cut and fill diagram, reserve pit, trash cage, access onto the location, parking, living facilities, and rig orientation.

## 10. RECLAMATION

Reclamation starts once the reserve pit is dry, at which point it will be back filled. Liner top will be folded over contents and covered with  $\geq 24$ " of dirt. The reserve pit and any pad areas not needed for producing the well will be reclaimed as an interim measure. Once the well is plugged, the remainder of the pad and road will be reclaimed.

All reclamation will leave the terrain with a natural shape, slopes will be no steeper than 3 to 1, subsoil will be used to fill the reserve pit, all compacted areas will be ripped  $\geq 12$ " deep with the contour, topsoil will be spread across all compacted areas and harrowed with the contour, and water bars will be installed. A seed mix will be drilled as prescribed by the Navajo Nation, BIA, or BLM. Weeds will be controlled in accordance with Tribal, BIA, or BLM requirements.

## 11. SURFACE OWNER



API Well Number: 43037500490000

NNOGC Exploration and Production LLC Tohonadla 36-N 402' FSL & 1898' FWL Sec. 36, T. 41 S., R. 21 E. San Juan County, Utah

PAGE 9

All construction will be on Navajo Tribal surface. Project Review Office phone is (928) 871-6447. Address is P. O. Box 2249, Window Rock, AZ 86515. Land use will be:

Well Site: 205' x 270' = 1.27 acres + Road & Pipeline: 40' x 972.91' = 0.90 acre Total land use = 2.17 acres

## 12. OTHER INFORMATION

Blue Mountain Hospital is a  $\approx 3/4$  hour drive away in Blanding at 802 South and 200 West. Hospital phone number is (435) 678-3993.

Bertha Spencer (BIA), Esther Kee & Pam Kyselka (Navajo Nation), Marcella Martinez (BLM), Racheal Dahozy (NNOGC), Gerald Huddleston (Huddleston Land Surveying), and Charles Black (Permits West) conducted an on site inspection on October 5, 2011.

## 13. REPRESENTATION & CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this <u>25th</u> day of <u>January</u>, <u>2012</u>.



PAGE 10

Brian Wood, Consultant Permits West, Inc.

37 Verano Loop, Santa Fe, NM 87508

(505) 466-8120

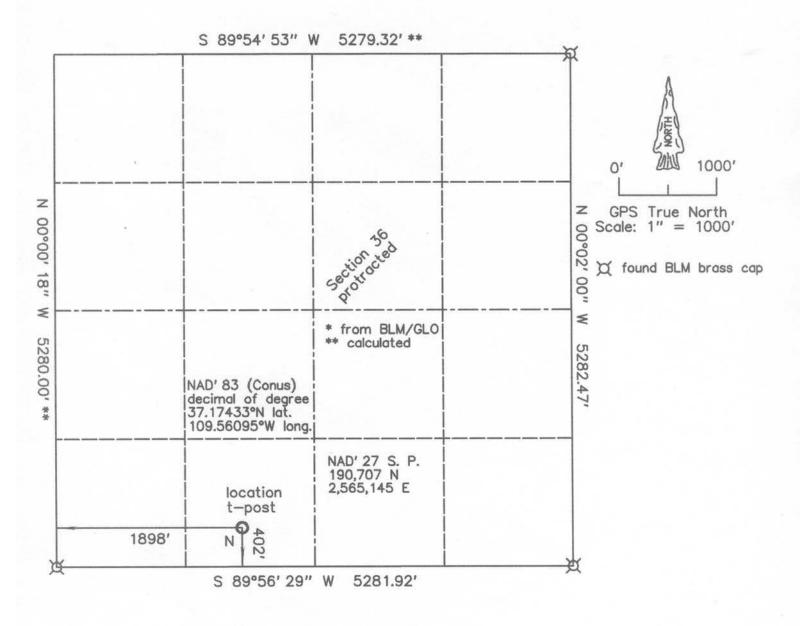
FAX: (505) 466-9682

Mobile: (505) 699-2276

The field representative will be:

Bill McCabe or John Hatch NNOGC Exploration and Production LLC 1675 Broadway, Suite 1100 Denver, CO 80202 (303) 534-8300



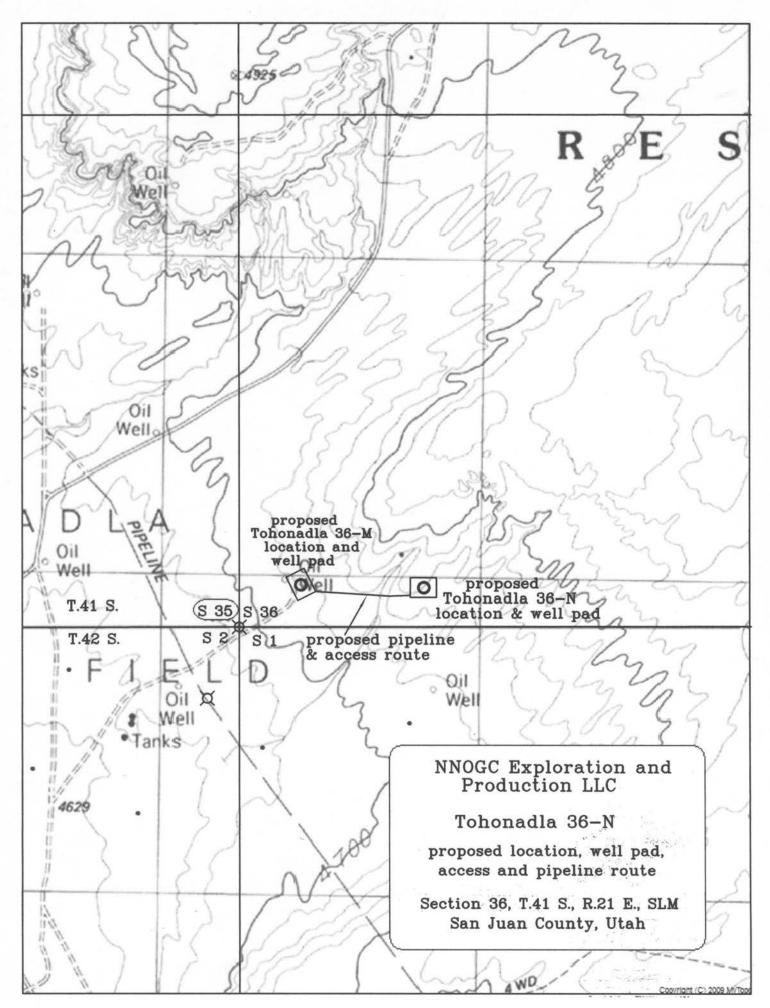


Location Description — NNOGC Exploration and Production LLC Tohonadla 36—N 402' FSL & 1898' FWL Section 36, T.41 S., R.21 E., SLM 4756' ground elevation NAVD' 88 San Juan County, UT



The above and plat is correct to my knowledge and belief Utah Land Surveyor 161297.

date: 08/04/2011



API Well Number: 43037500490000

# TOHONADLA FIELD-WIDE HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

# NNOGC Exploration and Production, LLC

BLM LEASE NUMBERS:

14-20-603-229
&

14-20-603-270
San Juan County, Utah

Navajo Nation Oil & Gas Company, Inc. Post Office Box 4439 Window Rock, Arizona 86515

#### **Prepared For:**



#### **Prepared By:**



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## CHECKLIST FOR DRILLING, WORK OVER, AND MAINTENANCE IN H<sub>2</sub>S ENVIRONMENT

- 1. Two safety briefing areas at least 100 yards from well head and arranged so that one briefing area will be upwind at all times. These sites should be located uphill whenever possible (see individual Applications for Permit to Drill [APDs] for topographic maps).
- 2. Identify direction of prevailing winds (see individual APDs).
- 3. At least two wind socks installed at all times on opposite sides of the pad.
- 4. Primary and secondary emergency escape routes (flagged trail minimum).
- 5. Number, types, and storage location of H<sub>2</sub>S emergency respirators for personnel, and number of personnel to be present onsite at any one time.
- 6.  $H_2S$  detector locations (3 minimum to include cellar or bell nipple, and mud tanks at shale shaker). Type and location of visual and audible alarms to be used.
- 7. H<sub>2</sub>S evacuation and emergency training procedures and schedule (i.e., Contingency Plan).
- 8. List of area residents within a two-mile radius, evacuation plan, and contact list (including agencies and individuals).
- 9. Types and quantities of mud additives and scavengers to be available at location for H<sub>2</sub>S operations.
- 10. Design features and operational procedures to be used to provide safe working environment (including a certification by the operator on individual APDs that all equipment meets standards for H<sub>2</sub>S service).
- 11. Appropriate warning signs and flags on all access roads.
- 12. Provisions for blocking and monitoring access to location during a critical incident.
- 13. Ventilation fan under rig floor.
- 14. In event of uncontrolled blowout, designation of local official who has authority to ignite flow.
- 15. Swabbing or drill stem fluids containing  $H_2S$  should be put through a separator to permit flaring of gas. Flare should have a continuous pilot light to ensure ignition of all such gas.

#### 1.0 GENERAL BACKGROUND

#### 1.1 Description of Hydrogen Sulfide Gas

Hydrogen Sulfide ( $H_2S$ ) is a colorless, transparent gas with a distinct and characteristic rotten-egg odor at low concentrations and not detectable by odor at high concentrations.  $H_2S$  at higher concentrations and/or over longer periods of exposure paralyzes the olfactory sense for that specific odor. The gas is extremely toxic to humans and can easily become dangerous and lethal. Extreme care and caution is needed to prevent injury and/or death.  $H_2S$  has a specific gravity of 1.192 which is heavier than air. It tends, therefore, to accumulate in low places and depressions. This collection of gas can lead to dangerous concentrations in areas such as arroyos and drainages.  $H_2S$  from "down hole" is often warmer than surface air and will therefore tend to rise and therefore affect workers above the escaping source. Hydrogen Sulfide is explosive and water soluble.

#### **1.2 TOXICITY**

American National Standards Institute (ANSI) standard: Z37.2-1972 Acceptable Concentrations of Hydrogen Sulfide describes H₂S toxicity in this way: Hydrogen Sulfide is an extremely toxic and irritating gas. Free hydrogen sulfide in the blood reduces its oxygen-carrying capacity, thereby depressing the nervous system. Hydrogen sulfide is oxidized quite rapidly to sulfates in the body, therefore no permanent after effects occur in cases of recovery from acute exposures unless oxygen deprivation of the nervous system is prolonged. There is no evidence that repeated exposures to hydrogen sulfide result in accumulative or systemic poisoning. Effects such as eye irritation, respiratory tract irritation, slow pulse rate, lassitude, digestive disturbances, and cold sweats may occur, but these symptoms disappear in a relatively short time after removal from the exposure. Odors become detectable in concentrations as low as .008 parts per million (ppm), but the sense of smell is lost after 2-15 minutes at 100 ppm.

#### 1.3 H<sub>2</sub>S First-Aid and Treatment Procedures

- Victim should be removed to fresh air immediately\*\*
- If victim is not breathing, rescue breathing or artificial breathing should be started immediately
- Treat for shock; keep victim warm and comfortable
- Call ambulance and/or doctor, take victim immediately to emergency room or other healthcare facility

\*\*The rescuer(s) should always wear personal protective equipment when attempting to rescue a  $H_2S$  victim. It is important to never increase the number of victims unnecessarily during a  $H_2S$  emergency.

## 2.0 HYDROGEN SULFIDE H<sub>2</sub>S CONTINGENCY PLAN

#### 2.1 Introduction

This plan provides required procedures to be followed to adequately provide for a safe  $H_2S$  working environment. These required procedures include safety procedures, precautionary measures, and training for emergency and standard procedures. This document sets forth the responsibilities of the operator and all individuals and entities under employment or contract with the operator working in a sour oil or gas  $(H_2S)$  area.

To make this H<sub>2</sub>SContingency Plan effective, and in order to provide a safe working environment, cooperation from all individuals is a necessity. To this end, each person onsite at an individual well must understand normal and emergency operating procedures for that particular site (See individual APDs for additional information). Each person at an individual site must have adequate information, training, and practice with the specific procedures described in this Contingency Plan, coupled with the information found in the individual well's APDs. It is the responsibility of the operator to provide adequate equipment, training, and procedures, and the individual worker's responsibility to participate fully in all H<sub>2</sub>S procedures, to familiarize themselves with the location of all safety equipment and features, and to keep equipment and procedures in working order and up to date.

In order for NNOGC to provide a safe working environment for all workers and individuals in the vicinity of the individual wells, safeguards are put in place. Initiative lies with each and every individual for the safety of all. To this end the drilling foreman is required to, and will enforce all safety procedures, for the benefit of all involved.

#### 2.2 Purpose

It is the intention of NNOGC to provide a safe working environment for all neighbors, employees, contractors, and others involved with, or in the vicinity of the well being drilled. There exists the possibility of encountering toxic H<sub>2</sub>S gas during the drilling, completion, maintenance, and production of individual wells in the Tohonadla Field. This H<sub>2</sub>S contingency plan will be put into effect after surface casing is drilled in any individual well, or when it is deemed necessary by the BLM in consultation with NNOGC.

Safety procedures are established for each person's safety connected with the operation, and for the safety of the residents of the local area. There are two separate houses (Rita & Benny Stash and Ken Black) closest to NNOGC wells, each being ≈680 feet west of two different wells (2 Bravo & 2G).

The NNOGC foreman will strictly enforce these procedures. Noncompliance may result in loss of pay or dismissal from the site, job, or employment.

#### 2.3 OPERATING PROCEDURES

Before this H<sub>2</sub>S Contingency Plan is operational, all personnel that are to be involved in the operation will be thoroughly trained\* in the proper use of breathing apparatus\*\* [i. e. Self-Contained Breathing Apparatus (SCBAs) and Escape Units], emergency procedures, and H<sub>2</sub>S first-aid and rescue methods. An approved list of trained personnel will be supplied by the safety company and stored with the drilling foreman at each individual site.

\* Required training for operation personnel will include, but not be limited to, H₂S safety course from an approved training company, safety briefing on drill site of all safety equipment use and locations before the start of work for each and every person

#### Tohonadla Field-Wide H<sub>2</sub>S Contingency Plan

onsite, safety-related training in-place, onsite 1,000 feet before the first  $H_2S$  formation.

- \*\* Throughout this Contingency Plan, breathing apparatus shall be understood as:
  - a) A Self-Contained Breathing Apparatus (SCBA) manufactured by a credible safety equipment manufacturer such as Scott Industrial c100 or similar.
  - b) Or an emergency Escape Unit such as the Scott SCRAM or Elsa (or similar) often referred to as hip packs, hoods, or pony bottles.

The two types of breathing apparatus will be differentiated as a SCBA or an Escape Unit as required.

#### 2.3.1 SAFETY EQUIPMENT

<u>Personal H<sub>2</sub>S Monitors</u> - Every person at the site will be required to wear a personal  $H_2S$  monitor at all times while onsite. Monitors will not be worn on hard hats, but should be worn on the waist belt or preferably near the chest in-front.

<u>Breathing Apparatus</u> - All personnel on the drill site will be assigned an individual breathing apparatus unit. This may be either an escape unit or a SCBA unit. A minimum of two SCBA type units will be onsite. These units will be used by the team whose duty it is to serve as the onsite rescue team.

Monitoring and Recording Devices - An experienced safety company (such as DXP Safety Alliance, Farmington, NM) will be responsible for the installation and monitoring of H<sub>2</sub>S detectors placed onsite. These units will be tested and recalibrated as the safety company requires. If H<sub>2</sub>S is detected, the monitors will be tested and recalibrated at least every 12 hours. This monitoring system may or may not be integral to the required two-stage alarm system onsite. This two stage system (visual and audio) will have a minimum of three H<sub>2</sub>S detector locations. Monitors will be located as follows: 1) in the cellar or on the bell nipple, 2) at the mud tanks' shale shaker, and 3) to be determined by the safety company. Visual (light) and audio (siren) alarms will activate when H<sub>2</sub>S concentrations reach 10 ppm.

<u>First-Aid and Rescue Equipment</u> - Stored onsite, but ideally up-hill and up-wind from H<sub>2</sub>S sources a minimum of one "rescue pack" will contain at least:

- 1 backboard, straps, head blocks
- a set of cervical collars (small to extra-large)
- 1 bag valve mask
- 1 bottle of oxygen
- gauze and other standard first-aid items
- --Suggested: 1 Automatic External Defibrillator (AED)

<u>Gas Monitor</u> - An appropriate monitor should be onsite that can measure for Lower Explosive Limit (LEL), Volatile Organic Compounds (VOCs), and other explosive or hazardous gases.

#### 2.3.2 SAFETY PROCEDURES

<u>Cascade System</u> - Every person required to perform duties within "safety zones" (see list below) will be provided with breathing equipment attached to a cascade air system. These areas are as follows

- rig floor
- mud pit

#### Tohonadla Field-Wide H<sub>2</sub>S Contingency Plan

- derrick
- shale shaker
- mud hopper and bulk hopper
- all hazardous locations will be accessible by hose and work pack (SCBA)

Escape Routes - Two escape routes will be flagged at a minimum and kept clear at all times.

<u>Safety Briefing Areas</u> – The NNOGC Foreman will establish two safety briefing areas located at the end of escape routes (see above). The Foreman will use best judgment along with information from individual well APDs to locate briefing areas that will be clearly marked, with at least one briefing area located uphill. One safety briefing area will always be upwind. Refer to specific maps and diagrams available in individual well's APDs for information helpful in establishing two Safety Briefing Areas. Figures 1 and 2 provide examples of Safety Briefing Areas placement.

<u>Safety, first-aid, and rescue equipment</u> – Safety, first-aid, and rescue equipment will be properly stored onsite using best practices. This will include proper maintenance and scheduled testing, inspection, and training/practice using safety equipment and methodologies.

<u>Service companies</u> - All service companies will be briefed regarding potential hazards of the individual well site including the presence (or potential for)  $H_2S$ . These companies will be required to provide breathing apparatus and training to their employees. No service company personnel will be allowed onsite without meeting these requirements. In addition, a safety briefing under the direction of the drill foreman regarding site specific  $H_2S$  procedures will be provided to each new personnel member reporting onsite.

<u>Drills and practice</u> - Drills reviewing all and any safety procedures including evacuation, rescue, and proper procedures to shut-in a well, and identify source of H<sub>2</sub>S in instance of a leak will be practiced under the supervision of the safety company representative and company foreman. Proper use of breathing apparatus will be instructed during such drills. Drill schedule will be designed to familiarize new personnel with all safety procedures. Each crew should also be familiar with all operations. Drills would include a short work period in safety equipment.

Warning Signs - Warning signs will be posted at all access roads (See examples in Figures 1 and 2). "No smoking" signs will be posted at access points as well. Signs will be posted more than 200 feet and no more that 500 from well pad. When H<sub>2</sub>S is present at 10 ppm or greater, a red flag shall be displayed on the warning sign. Gates, road barricades, and/or gate guards will be used if necessary to prevent access during critical or hazardous situations.

<u>Wind Socks</u> - A minimum of two windsocks will be installed at locations easily observable from all work areas on opposing sides of the pad (see examples in Figures 1 and 2). Specific wind sock locations for each site will be identified by the company foreman to allow easy visibility for all workers. If more than two windsocks are needed in order to allow "workers" to easily identify the wind direction at all times, more wind socks will be installed.

**<u>Vehicle Parking</u>** - Vehicles should be parked at least 200 feet from a well site with their noses pointing away from the well site. Preferably, vehicles will be located uphill and upwind from the well along the escape route. Vehicle parking areas for each site will be evaluated and located by the company foreman.

<u>Testing Fluids</u> - Swabbing and testing fluids containing  $H_2S$  will be passed through a separator to permit flaring of the gas. There will be a continuous pilot light in such instances to completely flare subject gases.

#### Tohonadla Field-Wide H₂S Contingency Plan

**<u>Bug Blowers</u>** - Explosion proof electric fans will circulate air to all critical locations when necessary.

Drills reviewing any safety procedures including evacuation, rescue, and proper procedures to shutin a well, and identify source of  $H_2S$  in instance of a leak, will be practiced under the supervision of the safety company representative and company foreman. Proper use of breathing apparatus will be instructed during such drills. Drill schedule will be designed to familiarize new personnel with all safety procedures. Each crew member should also be familiar with all operations. Drills should include a short work period in safety equipment.

#### 2.3.3 WORKING CONDITIONS

Occupational Safety and Health Administration (OSHA) has set guidelines for Permissible Exposure Limits (PEL). This standard is to be considered the threshold **never to be exceeded** for the health and safety of all workers on this site. Ideally, exposure would never reach these levels. Exposure limits are discussed below.

#### 2.3.3.1 Exposure Limits

OSHA Permissible Exposure Limit (PEL) for General Industry: 29 CFR 1910.1000 Z-2 Table -- Exposures shall not exceed 20 ppm (ceiling) with the following exception: if no other measurable exposure occurs during the 8-hour work shift, exposures may exceed 20 ppm, but not more than 50 ppm (peak), for a single time period up to 10 minutes.

OSHA Permissible Exposure Limit (PEL) for Construction Industry: <u>29 CFR 1926.55 Appendix A</u> -- 10 ppm, 15 mg/m<sup>3</sup> Total Weighted Average (TWA), accessed via the internet at the following address:

http://www.osha.gov/dts/chemicalsampling/data/CH 246800.html#exposure

The maximum exposure limit for an 8-hour day is less than 10 ppm.

#### 2.4 H<sub>2</sub>S EMERGENCY PROCEDURES

#### 2.4.1 INCIDENT

H<sub>2</sub>S alarm system activation. Light and siren warnings or personal H<sub>2</sub>S monitor activation for any one "worker."

#### 2.4.2 PRIMARY EMERGENCY PROCEDURE

- i. All rig crew personnel and all auxiliary personnel must **DON BREATHING**APPARATUS IMMEDIATELY!
- ii. Rig crew should mask up with SCBA type work packs preferentially.
- iii. All auxiliary crew should move to safety briefing area, uphill and upwind.
- iv. All non-essential personal should continue to evacuate site.

#### 2.4.3 SECONDARY EMERGENCY PROCEDURE

- I. Supervisory Personnel
  - i. Company Foreman
    - a. Proceed to cascade trailer and check for safe operation of cascade system
    - **b.** Proceed to active safety briefing areas and account for all personnel. If all personnel are not accounted for, then initiate an appropriate search.
    - c. Return to drilling floor and supervise operations

#### Tohonadla Field-Wide H₂S Contingency Plan

#### ii. Tool Pusher

- **a.** Proceed to cascade trailer and check if Company Foreman is operating cascade system safely. If NOT, ensure safe operations of the cascade system.
- **b.** Proceed to drilling floor and supervise operations. Make sure all crew members are accounted for and institute buddy system. If all personnel are not accounted for, initiate appropriate search.

#### II. Rig Crew

#### i. Driller

- a. if drilling
  - 1. after donning breathing apparatus proceed to console and raise Kelly to slip-set position
  - 2. shut down mud pumps
  - 3. monitor well flow, remain at console
  - 4. using hand signals verify all personnel are at stations, verify company man and toolpusher's positions, initiate search if well is not flowing

### **b.** If tripping

- 1. after donning breathing apparatus, put pipe in the slip-set position
- 2. stab safety valve, close safety valve
- 3. monitor well flow, remain at console
- 4. watch derrick man descend from derrick, verify all personnel locations, verify company man and tool pusher's positions, initiate search if well is not flowing

#### **c.** if well is flowing

- 1. after donning breathing apparatus, shut well in HARD
- 2. verify all personnel locations, verify company man and tool pusher's positions, initiate search if necessary
- 3. obtain necessary pressures for well control
- 4. Proceed to safety briefing area with crew, plan well control operations with all personnel

#### ii. Derrick Man

- **a.** after donning breathing apparatus, go to pit side window on the floor whether drilling or tripping (descend derrick)
- **b.** maintain visual contact with driller and monitor flow
- **c.** if mud properties are needed, then proceed to the shaker with "buddy"
- **d.** monitor other hands on pit side of rig visually
- e. proceed to open manual well-head if necessary (with "buddy")

#### iii. Motorman

- **a.** after donning breathing apparatus, go to the cascade system and ensure safe operation
- **b.** maintain visual contact with chain hand on doghouse side of floor

#### iv. Chain Hand

- a. after donning breathing apparatus, stab safety valve if tripping
- **b.** go to doghouse/pipe-rack and maintain visual contact with driller and motorman

#### v. Floorman

- a. after donning breathing apparatus, stab safety valve if tripping
- **b.** aid driller while maintaining visual contact with driller, derrickman, and chainhand

#### **III.** Auxiliary Personnel

#### Tohonadla Field-Wide H<sub>2</sub>S Contingency Plan

- i. Mud engineer and Company man or geologist are to act as wardens. Wardens must account for all other auxiliary crew.
- ii. All auxiliary crew are to remain in safety briefing area unless evacuated by wardens.
- **iii.** Wardens organize search with notification from company. All searches are to be done with "buddy". Geologist warden should remain in safety briefing area.

#### 2.4.4 IGNITING THE WELL

#### I. Decision

- i. The Company Foreman holds the responsibility for the decision to ignite a well. In the case where he is incapacitated or absent, authority passes to the tool pusher and then the contract driller
- ii. the decision to ignite the well is only to be made as a last resort safety measure when
  - a. there is threat to human life and grave threat to public safety and equipment
  - **b.** there is no alternative way of containing the well given the emergency faced
  - c. an attempt was made to contact area office (circumstances permitting)\*

#### \*when human life is threatened, no delay in decision-making can be afforded

#### II. Instructions for Igniting the Well

- i. Two individuals are required for ignition
- ii. Both individuals will wear SCBAs & have 200-foot retrieval ropes tied to their waists
- iii. One individual will measure the atmosphere for explosive gases with appropriate meter
- iv. The other individual will remain in the safety briefing area
- **v.** Others in the briefing area are to remain aware of both individuals and aid as able. If either tethered individual is overcome by gas, he should be pulled to safety.
- **vi.** The well should be lit with a 25 mm meteor type flare gun when well conditions allow. The safest method of igniting the well should always be used.
- vii. Burning H₂S will produce sulfur dioxide which is poisonous. The area therefore is not safe once the well has ignited. Continue to observe all emergency procedures and follow orders from supervisors and the area office. Notice of incident must be reported to all appropriate authorities.

#### 3.0 APPENDICES

## 3.1 CHECK LIST FOR SAFETY EQUIPMENT (DESIGNED FOR A MAXIMUM OF 11 PEOPLE)

- Safety Trailer housing cascade system at least ten 300 cu. ft. bottles of compressed air
- 7 SCBA type breathing apparatus with 45 cu. ft. bottles
- §5 breathing masks connected to the cascade system with 7 cu. ft. pony bottles
- 2 extra 300 cu. ft. bottles able to refill SCBA bottles to be placed at the safety briefing areas
- ½ Wind socks
- 1 Flare gun and flares
- 1 rescue pack (as described in section 2.3.1)
- Warning signs for access (flags for marking conditions)
- 2 "Safety Briefing Areas", signs, and evacuation route flags
- †H<sub>2</sub>S monitors (personal and stationary)
- †Alarm system (audio and visual—explosion proof)
- †Gas monitor (LEL, VOC, etc.)

#### **3.2** EMERGENCY PHONE NUMBERS

Navajo Nation Oil & Gas Company Personnel to be Notified:

Name	Position	Contact Number
Wilson Groen	President	Office: (928) 871-4880
		Cell: (505) 879-6483
		Direct: (928) 871-8501
Wayne Williams	Exploration	Cell: (720) 334-9920
	Manager	Office: (303) 534-8300
John Hatch	Manager	Cell: (303) 887-3684
		Home: (303) 534-8300
Bill McCabe	Manager	Cell: (303) 257-6303

#### NNOGC Lead Contractor Personnel to be Notified:

Person	Company	Contact Number
John Thompson	Walsh Engineering & Production Corp.	(505) 327-4892
Paul Thompson	Walsh Engineering & Production Corp.	(505) 327-4892
West Hahn	Walsh Engineering & Production Corp.	(505) 327-4892

#### <u>Safety Company Personnel:</u>

Name	Position	Contact Number
(Name)	(Position)	(Number work)
		(Number home)

### **Local Agencies or Organizations:**

Local Agency or Organization	Number
San Juan County Fire Department (Monticello)	911
	(435) 587-3225
San Juan County Sheriff (Monticello)	911
	(435) 587-2237
San Juan County Emergency Management (Monticello)	(435)-587-3225
Blue Mountain Hospital	(435) 678-3993
	802 South, 200 West
	Blanding, UT
San Juan Hospital	(435) 587-2116
	364 West, 100 North
	Monticello, UT
Navajo Nation Police (Montezuma Creek)	(505) 368-1350
(Monument Valley)	(505) 325-0022

## Tohonadla Field-Wide H<sub>2</sub>S Contingency Plan

## Other Government Agencies or Organizations:

Other Government Agency or Organization	Number
National Response Center	800-424-8802
BLM - Monticello Field Office	(435) 587-1500
- Jeff Brown	(435) 587-1525
- Mobile	(435) 459-4886
- Field Manager	(435) 587-1505
BLM - Farmington Field Office	(505) 564-7600
- Jim Lovato	(505) 249-2004
BIA - Gallup, Bertha Spencer	(505) 863-8336
Utah Division of Oil, Gas and Mining (SLC)	(801) 538-5340
During Office Hours	(801) 243-9466
After Hours	
Utah State Emergency Response Commission	(801) 536-4123
Utah Highway Patrol (Monticello)	(435) 587-2000
Mexican Water Chapter House	(928) 674-3641
Red Mea Chapter House	(928) 656-3655
Utah Health Department (Price)	(435) 637-3671
US EPA Region 8 (Denver)	(800) 227-8917
Navajo Nation Minerals Dept. (Window Rock, AZ)	(928) 871-6587
Veterinarian, Watkins, Clyde H. DVM	(435) 678-2414
Helicopter - New Air Helicopters (Durango)	(970) 259-6247
- Heli NM (Albuquerque)	(866) 995 1058
Blanding Air Ambulance	(800) 742-8787
Classic Aviation	(800)-444-9220 Ext. 5

#### Tohonadla Field-Wide H₂S Contingency Plan

#### Residents within 2 miles of proposed NNOGC wells in the Tohonadla Field:

There are 22 homes and 1 NN Headstart within 2 miles of the Tohonadla Field (Leases 14-20-603-229 and 14-20-603-270). There are two separate houses (Rita & Benny Stash and Ken Black) closest to NNOGC's proposed wells in the Tohonadla Field, each being  $\approx 680$  feet west of two different wells, the 2 Bravo and 2G respectively (See Figure 3 and large format H<sub>2</sub>S Contingency Plan Map attached). The table below provides a list of all residents and the NN Headstart, their addresses, phone numbers, and known locations in latitude and longitude (NAD 83).

Name	Address	Number	Lattitude	Longitude
Samuel Buck	PO Box 494 Bluff, UT 84512	(435) 444-9281	N 37°11.073	W 109°35.239
Eugene Begay	PO Box 393 Bluff, UT 84512		N 37°11.110	W 109°35.159
John Yellowman	PO Box 553 Bluff, UT 84512	(505) 701-4422	N 37°11.072	W 109°35.178
John Tellowman	FO BOX 333 Bluff, OT 64312	(505) 701-4437	N 37 11.072	W 109 33.178
Benny & Rita Stash	PO Box 257 Bluff, UT 84513		N 37°10.425	W 109°34.681
Betty Stash	PO Box 213 Bluff, UT 84514	(435) 419-0863	N 37°10.372	W 109°34.789
Ken Black	PO Box 289 Bluff, UT 84515	(916) 995-6977	N 37°10.187	W 109°34.622
Jerome Benally	PO Box 75 Bluff, UT 84516	(435) 201-1208	N 37°09.673	W 109°34.244
NN Headstart			N 37°09.425	W 109°34.123
Tammy & Mark Black	PO Box 390 Bluff, UT 84518	(435) 459-1139	N 37°09.670	W 109°33.907
Valerie & Efren Lee	PO Box 366 Bluff, UT 84519	(435) 669-3592		
Leo Blackhorse	PO Box 409 Bluff, UT 84520	(435) 444-0160	N 37°09.359	W 109°34.010
Ophelia Blackhorse	PO Box 586 Bluff, UT 84521	(435) 444-0640	N 37°09.350	W 109°33.992
Tom Tsosie Boy	PO Box 154 Bluff, UT 84522		N 37°09.286	W 109°34.385
Leroy Boy			N 37°09.266	W 109°34.379
Blue House			N 37°08.652	W 109°34.531
Susan Blackhorse	PO Box 207 Bluff, UT 84525		N 37°08.578	W 109°34.545
Pauline Black			N 37°08.550	W 109°34.561
Tyra Benally	PO Box 447 Bluff, UT 84525	(970) 570-5154	N 37°08.590	W 109°34.496
Mary Benally	PO Box 306 Bluff, UT 84525	(801) 403-6125	N 37°08.565	W 109°34.483
Paul Atcitty	PO Box 348 Bluff, UT 84525	(435) 444-0432	N 37°12.811	W 109°36.886
Charley Bitsoi	PO Box 217 Bluff, UT 84525	(435) 220-9122	N 37°10.259	W 109°30.926
Emary Maryboy	PO Box 356 Bluff, UT 84525	(435) 444-9647	N 37°10.218	W 109°30.811
Ruth Bitsoi	PO Box 267 Bluff, UT 84525	(435) 444-9087	N 37°10.114	W 109°30.746

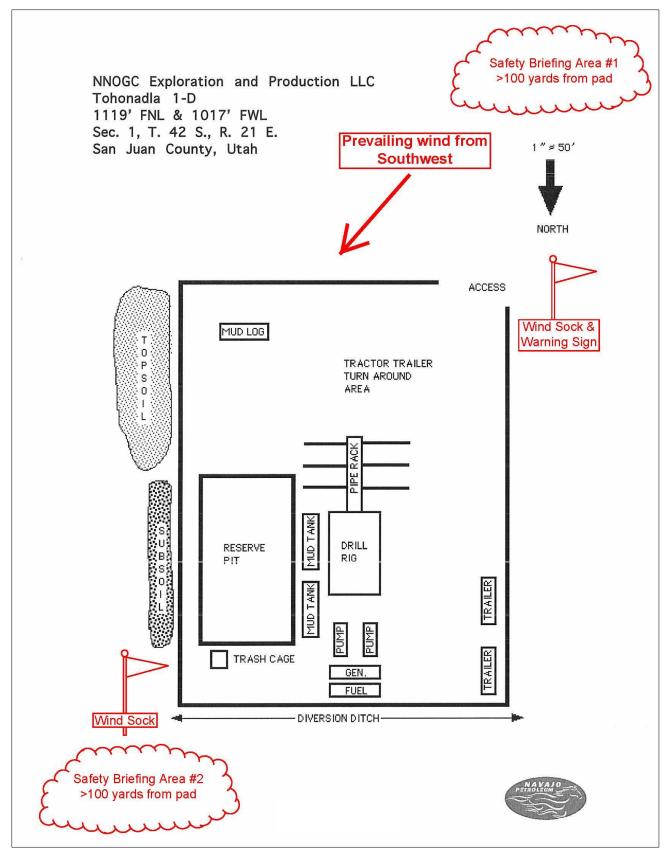


Figure 1. Example well pad diagram from Toho 1D APD with wind socks and Safety Briefing Areas.

#### Tohonadla Field-Wide H₂S Contingency Plan

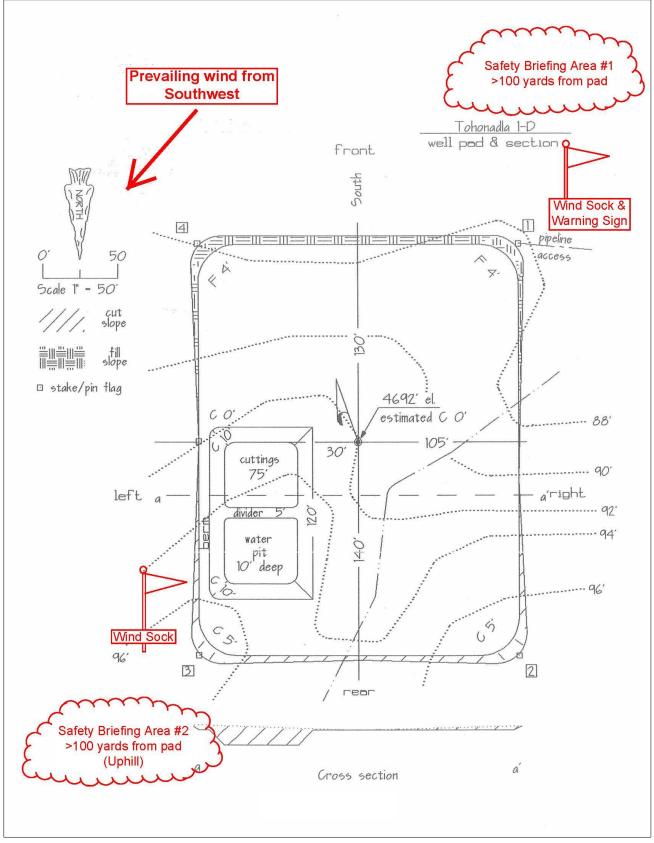


Figure 2. Example well diagram with original topography, wind socks, and Safety Briefing Areas.

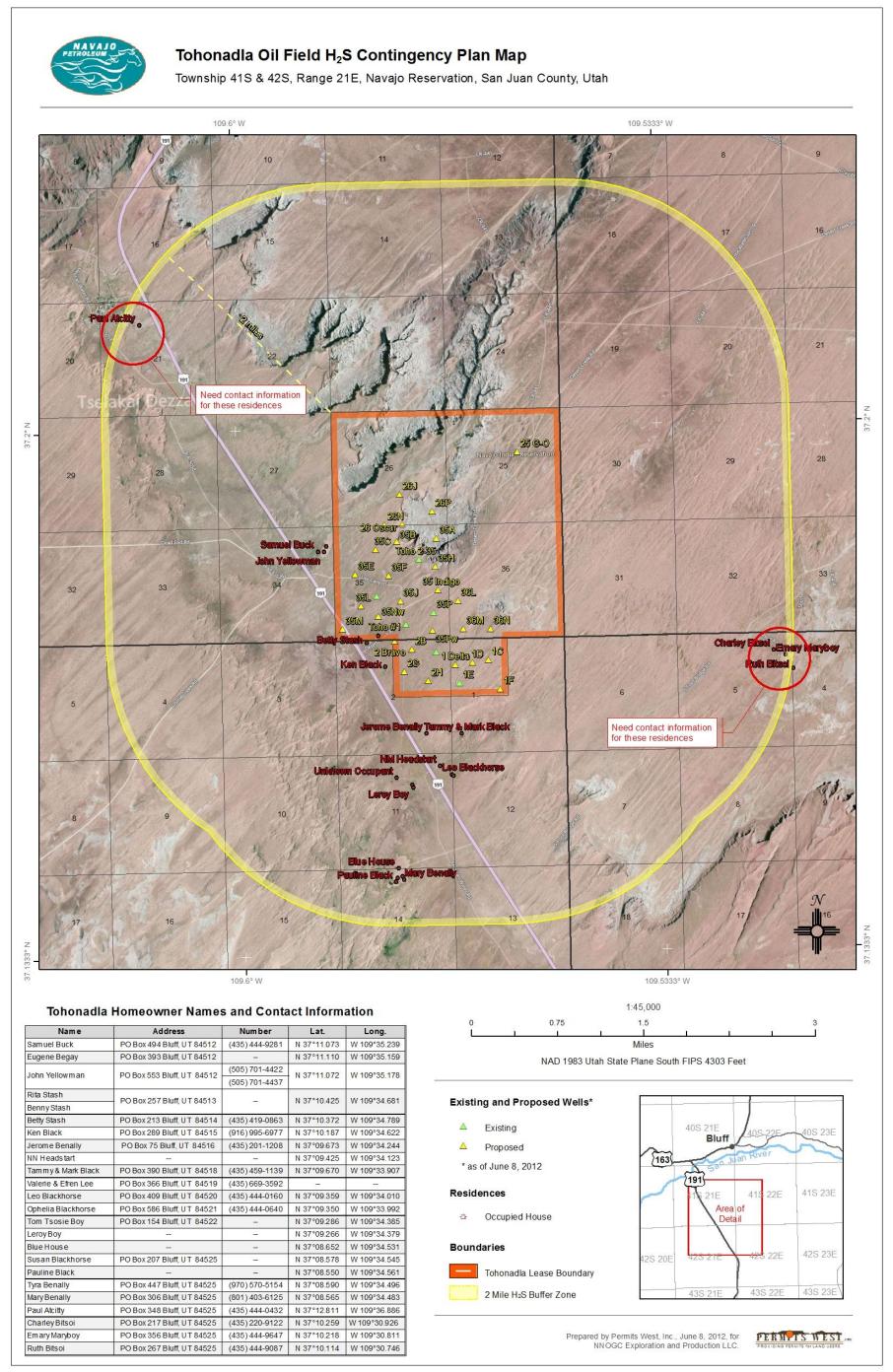


Figure 3. H<sub>2</sub>S Contingency Plan Map: Tohonadla Field-Wide with 2-mile buffer, contact names, and phone numbers.

API Well Number: 43037500490000

#### **NAVAJO NATION OIL & GAS COMPANY**

#### **EXPLORATION & PRODUCTION, LLC**

1625 Broadway, Suite 1000 • Denver, Colorado • 80202

Telephone (303) 534-8300 • FAX (303) 534-1405

January 14, 2013

Utah Department of Natural Resources: Division of Oil, Gas, and Mining

Diana Mason

P.O. Box 145801

Salt Lake City, Utah 84114-5801

Dear Diana:

**RE:** EXCEPTION TO LOCATION

Well Name: Tohonadla 36-N

APD Number: 7483

Lease No.: 14-20-603-229

Operator: NNOGC Exploration and Production, LLC

Pursuant to R649-3-2, I would like to request an exception for the location of the above referenced well.

The location of the proposed well is not in the center of the quarter-quarter in Section 36: Township 41 South, Range 21 East SLPM, San Juan County, Utah. The site of this proposed well is on Navajo Tribal land and the Navajo Nation is the only owner within 460 feet of the proposed well.

NNOGC has received approval from the BIA, BLM, the Navajo Nation and NEPA for this proposed well and pipeline on Navajo Tribal Trust land. The reason for this particular well location is for production in the Desert Creek and Ismay formations. Under the terms of the Navajo Nation Tribal Lease, NNOGC has the obligation to develop these mineral resources.

The need for this project is established under the Federal Onshore Oil & Gas Leasing Reform Act of 1987 to extract mineral resources from Indian Tribal lease land for oil and gas development.

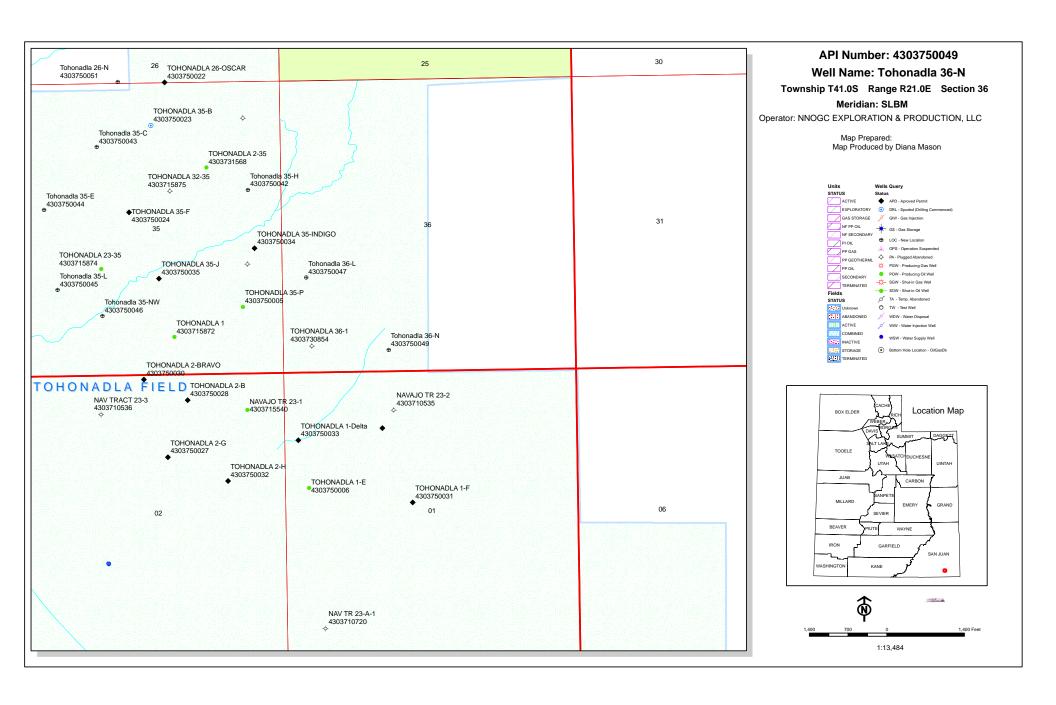
Attached to the Application for Permit to Drill is a well location plat map showing the siting of the proposed well.

Should you require any additional information to approve this exception, please contact me at (303) 534-8300.

Sincerely,

Katie Hvnes

Associate Landman



API Well Number: 43037500490000

## **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	1/14/2013	API NO. ASSIGNED:	43037500490000

WELL NAME: Tohonadla 36-N

OPERATOR: NNOGC EXPLORATION & PRODUCTION, LLC (N3930) **PHONE NUMBER:** 303 538-8300

**CONTACT:** Lauren Germinario

PROPOSED LOCATION: SESW 36 410S 210E Permit Tech Review:

> **SURFACE: 0402 FSL 1898 FWL Engineering Review:**

> BOTTOM: 0402 FSL 1898 FWL Geology Review:

**COUNTY:** SAN JUAN

**LATITUDE**: 37.17427 LONGITUDE: -109.56088 **UTM SURF EASTINGS: 627758.00** NORTHINGS: 4115174.00

FIELD NAME: TOHONADLA LEASE TYPE: 2 - Indian

LEASE NUMBER: 14-20-603-229 PROPOSED PRODUCING FORMATION(S): LEADVILLE

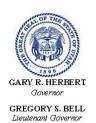
SURFACE OWNER: 2 - Indian **COALBED METHANE: NO** 

RECEIVED AND/OR REVIEWED:	LOCATION AND SITING:
<b>₽</b> PLAT	R649-2-3.
<b>▶ Bond:</b> INDIAN - RLB0006712	Unit:
Potash	R649-3-2. General
Oil Shale 190-5	
Oil Shale 190-3	✓ R649-3-3. Exception
Oil Shale 190-13	✓ Drilling Unit
<b>✓ Water Permit:</b> 09-135	Board Cause No: R649-3-3
RDCC Review:	Effective Date:
Fee Surface Agreement	Siting:
Intent to Commingle	R649-3-11. Directional Drill
Commingling Approved	

Comments: Presite Completed

Stipulations:

1 - Exception Location - dmason 4 - Federal Approval - dmason 23 - Spacing - dmason



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

## Permit To Drill

\*\*\*\*\*\*

Well Name: Tohonadla 36-N API Well Number: 43037500490000 Lease Number: 14-20-603-229

Surface Owner: INDIAN Approval Date: 1/17/2013

#### Issued to:

NNOGC EXPLORATION & PRODUCTION, LLC, 1625 Broadway, Suite 1000, Denver, CO 80202

#### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-3. The expected producing formation or pool is the LEADVILLE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### **Exception Location:**

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an

area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available) OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

#### Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
  - Requests to Change Plans (Form 9) due prior to implementation
  - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Sundry Number: 44256 API Well Number: 43037500490000

	07475 05 117411			FORM 9
STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES				
DIVISION OF OIL, GAS, AND MINING				5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-603-229
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo	
	oposals to drill new wells, significantl reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well				8. WELL NAME and NUMBER: Tohonadla 36-N
2. NAME OF OPERATOR: NNOGC EXPLORATION & PR	RODUCTION, LLC			<b>9. API NUMBER:</b> 43037500490000
3. ADDRESS OF OPERATOR: 1625 Broadway, Suite 1000	) , Denver , CO, 80202	PHONE NUMBER 303 910-9525		9. FIELD and POOL or WILDCAT: TOHONADLA
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0402 FSL 1898 FWL			COUNTY: SAN JUAN	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 36 Township: 41.0S Range: 21.0E Meridian: S			STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF	NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE	OF ACTION	
,	ACIDIZE	ALTER CASING		CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING		CHANGE WELL NAME
1/17/2014	CHANGE WELL STATUS	COMMINGLE PRO	DUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	r	☐ NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANG	DON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF		RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	_			TEMPORARY ABANDON
Jano Sr Spaan	REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO RE	PAIR WELL	
	TUBING REPAIR	☐ VENT OR FLARE		WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXT	TENSION	✓ APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER		OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	w all pertinent detail	ls including dates, d	NOTES STATE OF THE PARTY OF THE
				Approved by the Utah Division of Oil, Gas and Mining
				Date: November 05, 2013
				Pare: 100 cul 10
				By:
NAME (PLEASE PRINT) Racheal Dahozy	<b>PHONE NUM</b> 928-871-4880	IBER TITLE Regulator	ry Analyst	
SIGNATURE N/A		<b>DATE</b> 10/29/20	)13	

Sundry Number: 44256 API Well Number: 43037500490000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43037500490000

API: 43037500490000 Well Name: Tohonadla 36-N

Location: 0402 FSL 1898 FWL QTR SESW SEC 36 TWNP 410S RNG 210E MER S

Company Permit Issued to: NNOGC EXPLORATION & PRODUCTION, LLC

**Date Original Permit Issued: 1/17/2013** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No</li> </ul>
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes No
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: Racheal Dahozy Date: 10/29/2013

Sig

Title: Regulatory Analyst Representing: NNOGC EXPLORATION & PRODUCTION, LLC

Sundry Number: 58456 API Well Number: 43037500490000

			FORM 9
STATE OF UTAH		I OKW 3	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-603-229	
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NAVAJO	
	oposals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: Tohonadla 36-N	
2. NAME OF OPERATOR: NNOGC EXPLORATION & PI	RODUCTION, LLC		9. API NUMBER: 43037500490000
3. ADDRESS OF OPERATOR: 1625 Broadway, Suite 1000	0 , Denver , CO, 80202	PHONE NUMBER: 303 910-9525 Ext	9. FIELD and POOL or WILDCAT: TOHONADLA
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0402 FSL 1898 FWL		COUNTY: SAN JUAN	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 36 Township: 41.0S Range: 21.0E Meridian: S		dian: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
1/17/2015	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	_		
Date of option.	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	L TUBING REPAIR	☐ VENT OR FLARE ☐	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates, o	depths, volumes, etc.
			Approved by the
			Debenhoisic04of2014 Oil, Gas and Mining
			Date:
			By: Daggell
			7.3
NAME (PLEASE PRINT) Racheal Dahozy	PHONE NUM 928-871-4880	BER TITLE Regulatory Analyst	
SIGNATURE	020 071 4000	DATE	
N/A		12/2/2014	

Sundry Number: 58456 API Well Number: 43037500490000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43037500490000

**API:** 43037500490000 **Well Name:** Tohonadla 36-N

Location: 0402 FSL 1898 FWL QTR SESW SEC 36 TWNP 410S RNG 210E MER S

Company Permit Issued to: NNOGC EXPLORATION & PRODUCTION, LLC

Date Original Permit Issued: 1/17/2013

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• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes  No
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: Racheal Dahozy Date: 12/2/2014

Title: Regulatory Analyst Representing: NNOGC EXPLORATION & PRODUCTION, LLC

RECEIVED: Dec. 02, 2014



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

March 17, 2016

JOHN R. BAZA
Division Director

NNOGC Exploation & Prod., LLC. 1625 Broadway, Ste. 1000 Denver, CO 80202

Re: APDs Rescinded for NNOGC Exploation & Prod., , San Juan County

Ladies and Gentlemen:

Enclosed find the list of APDs that is being rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded as of March 17, 2016.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

**Environmental Scientist** 

cc: Well File

Bureau of Land Management, Monticello



43-037-50042	TOHONADLA 35-H
43-037-50043	TOHONADLA 35-C
43-037-50044	TOHONADLA 35-E
43-037-50046	TOHONADLA 35-NW
43-037-50047	TOHONADLA 36-L
43-037-50048	TOHONADLA 26-J
43-037-50049	TOHONADLA 36-N
43-037-50050	TOHONADLA 35-M
43-037-50051	TOHONADLA 26-N
43-037-50045	TOHONADLA 35-L